

The Samsung logo is located in the top left corner. It consists of the word "SAMSUNG" in a bold, sans-serif font, enclosed within a light gray oval shape.

SSM mobile

English

Android ver **1.0**

SSM mobile is an exclusive application for smart phones and tablet PCs that can be used to perform real time control and monitoring and to search for and edit videos upon user's request by accessing the Samsung Techwin integrated monitoring system product called SSM(Samsung Security Manager).

This manual was written on the basis of the Samsung Electronics smartphone handset Galaxy S2. In case that you use a different handset, you will see that some button locations or flows are different.

SSM mobile can be downloaded and installed for free from Google Play.

- ❖ SSM mobile can be searched by using the keywords, "**SSM mobile**", "**SSM**", or "**Techwin**". (case insensitive).

0. Before Installation

To receive videos from your handset by connecting it to the SSM system, it is recommended your handset have at least the following specification.

Item	Recommended
CPU	1.2GHz DualCore or higher
RAM	1GB or higher
Available RAM	100MB or higher
OS	Android OS 2.3.x, 4.0.x, 4.1.x



- The video service involves lots of data transmission, so if you use 3G or 4G (LTE) data communication service, excessive fees can be charged according to your service provider's policy.
- To receive reliable video support, the network speed shall be as fast as 10Mbps, and when you access the 3G network or if you are under unstable Wi-Fi connection environment, the video can be delayed or disconnected.
- The Wi-Fi environment may be weak to the security, so you will have to install a suitable vaccine program on your mobile device.

Your handset will be tested for its software quality in the following conditions.

- Samsung Galaxy S2 (Android v2.3.5) series
- Samsung Galaxy S3 (Android v4.1.2) series
- Samsung Galaxy Note (Android v4.0.4) series
- Samsung Galaxy Note 10.1 (Android v4.1.2) series

1. Start

To register the server information

1. If your SSM mobile has no registered SSM, you will be directed to the **<Add Server>** page.
 - Before using SSM mobile, please read this manual carefully to familiarize yourself with how the SSM (Samsung Security Manager) system is structured and how to use it.
 - The SSM consists of the Console program for the client and the System Manager and, Media Gateway for the server.
2. If you want to add a server to your SSM mobile, enter the following information.

- Name : When registering a server, enter an arbitrary name.
 - Otherwise, you may use the server name registered in the SSM Console.
 - Duplicated server name is not allowed. Be careful!
- Address Type : Depending on your network access environment, choose and register either **<HOST>** or **<DDNS>**.

If you enter a HOST type IP address, enter **<Host>** and **<Port>** and if you use a DDNS type, then enter **<DDNS ID>** registered at the DDNS service (www.samsungipolis.com).

- Host / Port : Set your server PC's IP address and port number.
- DDNS ID : If your server, System Manager is registered at the DDNS, then set the corresponding DDNS ID.
 - If you select DDNS as your address type, the port input window will disappear automatically.

The screenshot shows the 'Add Server' interface on an SSM mobile device. The interface is dark-themed with a blue header bar containing the text 'Add Server' and 'SSM mobile'. Below the header, there are several input sections: 1. 'Name' section: Includes a 'TIP' button and a text input field with the placeholder 'Enter server name.'. 2. 'Address Type' section: Features a dropdown menu currently set to 'HOST'. 3. 'Host' section: A text input field with the placeholder 'Enter the host name.'. 4. 'Port' section: A text input field with the placeholder 'Enter the port number.'. 5. 'Login ID' section: A text input field. At the bottom of the screen is a large 'Login' button.

- Login ID / Password : Enter your user ID and password.
 - Select <**Save Login ID**>. Then, you don't have to reenter your login ID again the next time you log in.
 - Select <**Auto Login**>. Then, you don't have to enter your login ID and password the next time you log in.
 - According to our security policy, if you enter wrong password for more than certain number of times set in the Console, you cannot log in for certain duration. Please remember you will be denied to access the system during this time even if you enter the correct password.
 - For more information, refer to Option Setup of SSM Configuration Manager.
 - If you want to access your SSM mobile, you can use the following strings for your login ID and password.
If either ID or password contains other string than specified below, you have to change it at the Configuration Manager.
 - Uppercase Alphabets (A to Z) / Lowercase Alphabets (a to z)
 - 10 Basic Numbers (0 to 9) / Non-alphanumeric Texts (ex: !, \$, #, and %)

3. Enter all the information and touch <**Login**>.

4. If you run your SSM mobile again, you will be directed to the SSM Login screen you accessed recently.

- SSM mobile allows you to log in simultaneously with an SSM Console user using his ID, but does not allow you to log in simultaneously with another SSM mobile user using his ID.

If you want to add a server

1. Touch the < ➤ > button on the right of the server name on the Login screen.
2. Touch the Menu button on your handset if you want to move to the Server List screen.
At the bottom of your screen, the menu icons are popped up.
3. Touch < ⊕ >.
4. Enter the information on the server you want to add in the Add Server screen.
5. If you touch < Save >, the server will be added to the Server List.


A screenshot of the 'Add Server' screen. At the top, it says 'Add Server' and 'SSM mobile'. There is a 'TIP' button. The form has fields for 'Name' (with placeholder 'Enter server name.'), 'Address Type' (a dropdown menu currently showing 'HOST'), 'Host' (with placeholder 'Enter the host name.'), and 'Port' (with placeholder 'Enter the port number.'). Below these is a 'Login ID' field. At the bottom are 'Save' and 'Cancel' buttons.

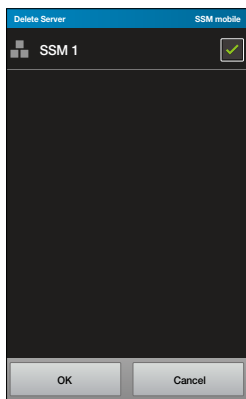
To edit the server information

1. Touch the Menu button on the Server List screen on your handset.
At the bottom of your screen, the menu icons are popped up.
2. Touch < ✎ >.
3. In the list, select a server to edit.
Or, you can press the < ➤ > button on the right of the server name you want to edit to display the Edit screen.
4. Upon completion of edition, touch < Save >.

A screenshot of the 'Edit Server' screen. At the top, it says 'Edit Server' and 'SSM mobile'. There is a 'TIP' button. The form has fields for 'Name' (with placeholder 'Enter server name.'), 'Address Type' (a dropdown menu currently showing 'DDNS'), 'DDNS ID' (with placeholder 'Please enter the DDNS ID.'), 'Login ID' (with placeholder 'Input Login ID'), and 'Password'. At the bottom are 'Save' and 'Cancel' buttons.

If you want to delete a registered server

1. Touch the Menu button of your handset in the Server List screen.
At the bottom of your screen, the menu icons are popped up.
2. Touch <  >.
3. Select a server to delete from the list.
4. Upon selection, touch <OK>.
The selected server will be deleted from the list.



If no video is in service after server registration

1. Go to the SSM Service Manager to check the service status of the System Manager and Media Gateway.
2. In the SSM Service Manager, check the IP addresses and port setting values for the System Manager and Media Gateway.
3. Check your privilege information in the User group Information of the SSM Configuration Manager.

2. Live Monitoring



View the video by the site

1. If you successfully log in SSM, the Live tab will be basically displayed on the screen.
2. SSM mobile allows you to view the video by the site.
3. If you select a site where you want to view live videos, it will provide them to you in the 4 Channel mode.
4. If you want to access the sub site, touch the < > button.



- Before you watch the NVR video, you have to register your device and activate your camera. Without activated channel, you cannot access the corresponding memory device.
- You can view and change the camera profile at Manage Camera of SSM Configuration Manager. SSM mobile requests videos suitable for the profile setup with a lower resolution.
- If you have changed the video codec, you should log out the SSM mobile S/W and log in again to apply the new codec to the system. Otherwise, the existing video codec will remain activated to affect your simultaneous access.

❖ Recommended Profile Information

For more stable live video monitoring, the following profile setting is recommended.

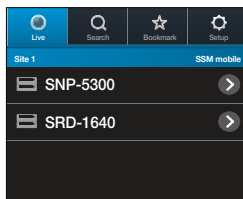
Codec	Resolution	Frame Rate	Compression / Transmission Quality
MJPEG	320X240 / 640X480	5fps	Normal (10)
H.264	320X240 / 640X480	10fps	Normal (10)




- The MPEG4 video codec is not supported.
- A video, if sized greater than 1.3 mega pixels, is not supported.
- As for a video sized over 640X480, only the main frames will be provided.

Device Based Video Play

1. SSM mobile allows you to select a device from the list for individual play.
2. If you select the Network Camera or Encoder, the video will be provided in the 1 Channel mode. And if you select DVR or NVR, the video will be provided in the 4 Channel mode.
3. In a storage device, you may select an individual channel when you touch the Move button < ➤ > to move to the sublist.



To change the channel

1. Touch the screen to display control buttons near the bottom.
2. Touch the Channel Change icon <  >.
It will display the list of channels you can move to.
3. Select a channel to display on the screen.



- In case of the 4 Channel mode, you can move in a group of 4 channels.



Touch and slide your finger on the screen from right to left to slide over to the next 4 channels in quad mode display.

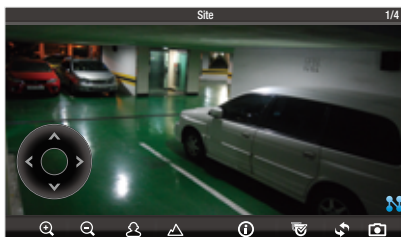
To switch to one-channel mode



Touch and hold briefly one of displayed 4 channels on the screen, or double touch on the desired split to switch to one-channel display mode with the selected channel.




3. Controlling the Live Video

The video control function is available only in the 1 Channel mode.





To View Network Status

You can use the Network icon on the right side to check the live video transmission status on the network.

	Shows that the network connection is good and the videos are received smoothly.
	The network connection is not stable, so the videos are not received smoothly.
	The network connection is not stable, so the videos are not received at all.

To Control Optical Zoom Function

You can control the network camera's optical zooming remotely.

1. Touch the screen to display control buttons near the bottom.
2. For zoom-capable cameras, touching <  > icon zooms in, and touching <  > icon zooms out.





- Zooming range and level differ from camera to camera.



You can also zoom in by pinch open using two fingers on the screen. To zoom out, pinch close on the screen.

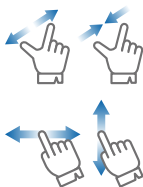
To control digital zooming

This function is for cameras not supporting optical zooming.

1. Touch the screen to display control buttons near the bottom.
2. Touch <  > button to zoom in, and touch <  > to zoom out digitally.



- Current digital zooming level is noted next to the digital zoom box, and digital zooming supports zooming up to x16.



You can also zoom in by pinch open using two fingers on the screen. To zoom out, pinch close on the screen.

Touch and hold to drag the screen in any direction to reveal the hidden part of the image if enlarged bigger than the screen.

To control Pan / Tilt

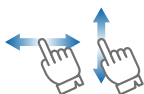
Supported by PTZ cameras only.

1. Touch the screen to display Pan/Tilt control buttons on the screen.
2. Touching the direction button moves camera's Pan/Tilt to the next step one by one.

3. Touch and hold any of the direction buttons to pan and tilt the camera continuously in the selected direction.



- Pan/Tilt range and level differ from camera to camera.





Drag the screen in up/down/left/right direction to Pan/Tilt the camera. Note that SSM mobile does not recognize diagonal direction, which will interpret user's dragging as the closest vertical or horizontal dragging.



- Even a camera device without the Optical Zoom function is equipped with the PTZ Control button as long as it provides the External PTZ function. This device does not support the Digital Zoom function.
- Pan/Tilt control result requires time for processing, since the command should reach camera device and performed by the camera. Video data size grows as the camera moves, which may result in delayed display. In 3G networks, it may take more than a few seconds to receive video data.
- In a network environment of poor stability, using Pan/Tilt control with lower video quality settings may help reduce such delays.


To adjust focus

This function allows manual adjustment of the camera focus.

1. Touch the screen to display focus control buttons on the screen.
2. Use Near Focus <  > and Far Focus <  > icons to adjust the focus range.

To View Video Information

You can check the configuration information of a registered device.


1. Touch Check Information <  > icon near the bottom of the screen.
2. A popup window with basic information of the connected device appears.



- To change the device settings, you should make a change manually for each setting item.
- The SSM Media Gateway converts audios to the G.711 codec for transmission.


To flip video image displayed

You can flip video image by rotating 180°.

1. Touch the screen to display menu and touch <  > icon.
2. Touch again to revert to the original screen.

To save the captured screen

Captures the currently displayed image and saves to the device storage as an image file.

1. Touch the screen to display menu and touch <  > icon.
2. The captured screen is saved as an image file in the device's image folder.

To listen to the audio

As long as an Audio supporting device is connected, you will be able to listen to the Audio in the 1 Channel Video Play mode.

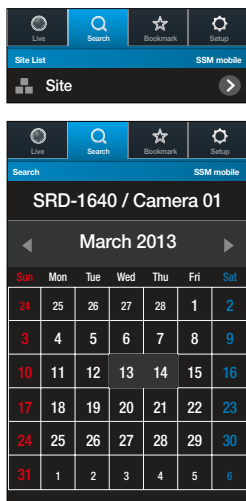
4. Searching / Playing Saved Video

To search by date/time

1. While logged in, move to the Search tab.
2. Select and touch a channel to search for.
3. Dates containing data of the selected device and channel are marked in the calendar. Touch < ◀ ▶ > button on the calendar's both ends of year/month indicator to traverse to the previous/next month.
4. Touch a date to search video, and the circular timeline (24 hours) appears. Timeline is marked with color for time zones having recorded data to be searched.

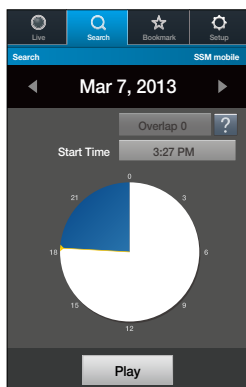


- If there are overlapping multiple data for the same time range, an overlapping list appears.



To play searched video

1. Check the circular timeline and set the time when you want to play the video.
2. Touch <Start Time> to set the beginning time once time setup dialog appears.
3. Touch <Play> button to start video playback and it plays for about 60 minutes from the beginning time.





- If the recorded video being played has interval of having no video, playback skips such interval and continues from the next existing position. The displayed play time may be different than the actual recording time depending on performance of network and playing device.
- For the efficiency, Audio is disabled during play.
- While another user is using the device, your access will be denied.

❖ Amount of Network Data Transfer for stored video

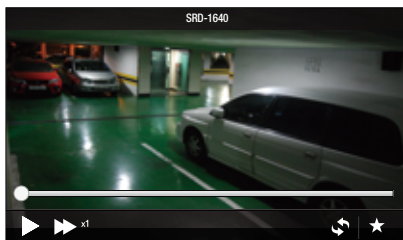
Codec	Resolution	Frame Rate	Compression	Bandwidth
H.264	640 x 480	10fps	10	0.69 Mbps
H.264	640 x 480	20fps	10	1.30 Mbps
H.264	800 x 600	10fps	10	1.10 Mbps
H.264	800 x 600	20fps	10	1.90 Mbps



- Above network data transmission is calculated based on SNB-7000.
- Videos of more than 1.3M pixels are not supported.
- For smooth and proper playback of stored recordings, it requires downloading bandwidth more than the specified minimum bandwidth in case if the network has interference.

To control playback

It provides basic playback control.



1. Touch the screen to display control buttons near the bottom.
2. To stop playback, touch < || > button to pause and the button switches to < ► > once paused.
3. To resume again, touch < ► > button.
4. To control playback speed, touch < ►► > button and the playback speed indicator appears.
5. The video is played at the selected play speed.
6. Touch < ↺ > icon to flip video image by rotating 180°.

To use the Timeline

You can jump to a certain point of playback by selecting time point on the timeline.

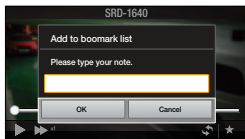
1. Touch the screen to display 60-minute timeline.
2. The timeline shows the played video's current playback time point.
3. Touch the time picker < ○ — > on the timeline, and drag it to a desired time point to skip to that point.
4. Touching the timeline automatically pauses the video playback. Move the time picker and touch < ► > button to resume playing.

5. To Use Bookmarks

To Register Bookmarks

You can bookmark a certain playback point on the video as a starting point.

1. While playing a video, touch < ★ > button at a desired point to create a bookmark.
2. The Add Bookmark popup appears, enter a note of the bookmark and save it. Inserting a note is optional, bookmark will be saved without a note.

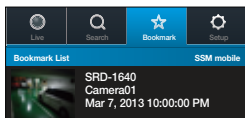


- Up to 100 bookmarks can be added, and selectively deleted once exceeded.

To Play Bookmarks

You can select a bookmark from the Bookmarks List to watch videos at a certain time at the selected bookmark.

1. After moving to the Bookmarks tab, select a bookmark from the Bookmarks List that you want to play.
2. Playback control for bookmarked video is the same as that of searched video.



- If there are overlapping multiple data for the same time range, an overlapping list appears.

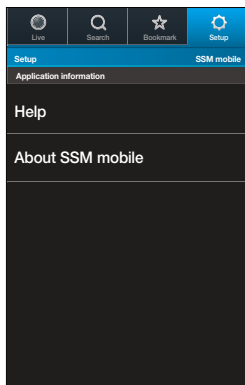
6. To Use Help

To see help screen

1. If you touch <Help> in the Settings tab, you will be directed to the web page where you can select a language.
2. If you select a language, the User Manual will be serviced in the selected language.



- It may automatically detect your displaying device's language configured and provide help in that language. Samsung Techwin's help is provided in 13 languages, and the default language is set to English.



To check the software version

1. In the Settings tab, touch <About SSM mobile>.
2. You can check the information of the current software version.

OPEN SOURCE ANNOUNCEMENT

- **LGPL 2.1** : FFmpeg
- **BSD 2.0** : ed-pad
- **MIT License V2** : dlc.sh-GUI, SAS-iPad-App, TweetNow

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Version 2.1, February 1999

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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- b)** Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user’s computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c)** Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d)** If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e)** Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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